Patent claims

1. A support system for catalyst gauzes in an ammonia oxidation burner, where the catalyst gauzes (1) and possibly support screens are being supported by ceramic fillings (3) and/ or catalyst contained in a burner basket with metal walls (4) and a perforated bottom plate (5),
characterized in that a "wave breaker" (9,11) is fixed to the metal wall and/or the outer part /periphery of the bottom plate.

2. A support system according to claim 1,
characterized in that the "wave breaker" is filled with ceramic fillings/ catalyst or similar material to obtain the same flow resistance as the filling material of the bed.

3. A support system according to claim 1,
characterized in that the "wave breaker" is a triangular shaped ridge (11).

4. A support system according to claim 1,
characterized in that the "wave breaker" is a smooth or perforated sheet (9) arranged at an angle of 10-60 ° to the wall.

5. A support system according to claim 4,
characterized in that the angle is 25-35°.

6. A support system according to claim 3, 4 or 5,
characterized in that wave breaker is made of segments.

7. A support system according to claim 6,
characterized in that the segments have end walls.

8. A support system according to claim 1,
characterized in that the "wave breaker" is a honeycomb structure.

9. A support system according to claim 8,
characterized in that the honeycomb structure has a sloping top (8).

10. A method of reducing movement of ceramic material and avoiding tearing of catalyst gauzes in an ammonia oxidation burner where the catalyst gauzes and possibly support screens are being supported by ceramic fillings and possibly a catalyst on a perforated plate or contained in a burner basket with metal walls and perforated bottom plate,
characterized in that a "wave breaker" is fixed to the metal wall and/or the outer part/periphery of the bottom plate of the burner basket and moves the ceramic material together with the metal wall during expansion.

11. Method according to claim 9,
characterized in that it is used a "wave breaker" formed like a triangular shaped ridge, a smooth or perforated sheet or a honeycomb structure.